

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated hereafter (where underlining “_” denotes additions and strikethrough “-” denotes deletions).

Claims:

1. (Currently Amended) A method comprising:
using a shared resource by a station; and
refraining from contending for access to said shared resource for a backoff
interval after the last use of said shared resource, wherein said
backoff interval is ~~based on at least one previous interval between~~
~~two successive accesses to the shared resource~~ determined by
measuring an average wait time that the station incurred during
previous access attempts.
2. (Original) The method of claim 1 further comprising transmitting a
frame using said shared resource after said refraining, wherein said shared
resource is a shared-communications channel.
3. (Original) The method of claim 1 further comprising powering down a
receiver for at least a portion of said backoff interval.

4. (Original) The method of claim 1 wherein said backoff interval is further based on at least one of:

- i) a moving average; and
- ii) a contention window value.

5. (Original) The method of claim 1 wherein said backoff interval comprises a time interval that is based on a random number.

6. (Original) The method of claim 5 wherein said time interval can assume a nonzero value only after an unsuccessful attempt to transmit occurs.

7. (Original) The method of claim 1 wherein said backoff interval is constrained to be at least as long as an IEEE 802.11 distributed interframe space.

8. (Currently Amended) A method comprising:
- using a shared resource by a station;
- refraining from contending for access to said shared resource for a backoff interval after the last use of said shared resource; and
- powering down a receiver for at least a portion of said backoff interval ,
- wherein said backoff interval is ~~based on at least one previous interval~~
- ~~between two successive accesses to the shared resource~~
- determined by measuring an average wait time that the station
- incurred during previous access attempts.
9. (Original) The method of claim 8 further comprising transmitting a frame using said shared resource after said refraining, wherein said shared resource is a shared-communications channel.
10. (Original) The method of claim 8 wherein said backoff interval is further based on at least one of:
- i) a moving average; and
 - ii) a contention window value.
11. (Original) The method of claim 8 wherein said backoff interval comprises a time interval that is based on a random number.

12. (Original) The method of claim 11 wherein said time interval can assume a nonzero value only after an unsuccessful attempt to transmit occurs.

13. (Currently Amended) An apparatus comprising:
a transmitter for using a shared resource; and
a processor for refraining from contending for access to said shared resource for a backoff interval after the last use of said shared resource,
wherein said backoff interval is ~~based on at least one previous interval between two successive accesses to the shared resource~~
determined by measuring an average wait time that the transmitter incurred during previous access attempts.

14. (Original) The apparatus of claim 13 further comprising a receiver for powering down for at least a portion of said backoff interval.

15. (Original) The apparatus of claim 14 wherein said receiver is also for receiving a value representing said backoff interval.

16. (Original) The apparatus of claim 13 wherein said processor is also for determining said backoff interval.

17. (Original) The apparatus of claim 13 wherein said shared resource is a shared-communications channel and wherein said transmitter communicates over said shared-communications channel in accordance with an IEEE 802.11 protocol.

18. (Currently Amended) An apparatus comprising:
a host computer for directing a station to use a shared resource, said station for:

- (1) using said shared resource;
- (2) refraining from contending for access to said shared resource for a backoff interval after the last use of said shared resource; and
- (3) powering down a receiver for at least a portion of said backoff interval, wherein said backoff interval is ~~based on at least one previous interval between two successive accesses to the shared resource~~ determined by measuring an average wait time that the station incurred during previous access attempts.

19. (Original) The apparatus of claim 18 further comprising an access point for:
- (1) determining said backoff interval; and
 - (2) distributing a value representing said backoff interval.
20. (Original) The apparatus of claim 19 wherein said station is also for receiving said value representing said backoff interval.
21. (Original) The apparatus of claim 18 wherein said backoff interval comprises a time interval that is based on a random number.
22. (New) An apparatus comprising:
- a means for transmitting using a shared resource; and
 - a means for refraining from contending for access to said shared resource for a backoff interval after the last use of said shared resource, wherein said backoff interval is determined by measuring an average wait time that the means for transmitting incurred during previous access attempts.
23. (New) The apparatus of claim 22 further comprising a means for powering down a receiving means for at least a portion of said backoff interval.

24. (New) The apparatus of claim 22 wherein said means for refraining from contending further comprises means for determining said backoff interval.

25. (New) The apparatus of claim 22 wherein said shared resource is a shared-communications channel and wherein said means for transmitting transmits over said shared-communications channel in accordance with an IEEE 802.11 protocol.